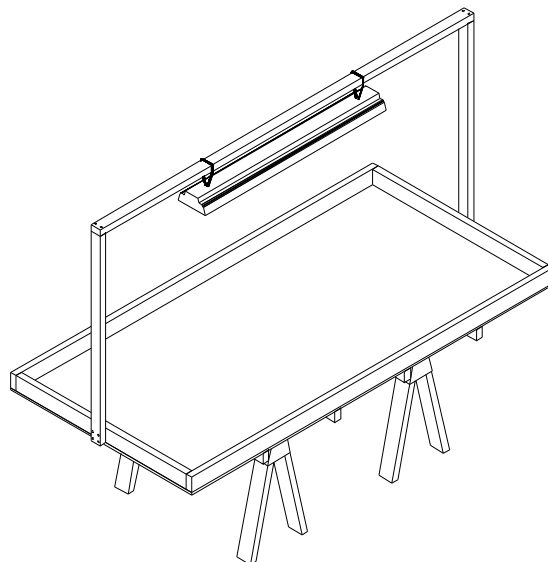




HANDS ON
TECHNOLOGY

www.hands-on-technology.de

FIRST LEGO® League Competition Table



Background:

When the FLL program piloted in the US in 1998 it was decided to create a competition table that was easy to make for the FLL teams and for the FLL Tournament organizers.

To make it as easy as possible the Competition Table elements was chosen from standard elements in the lumber business.

From 2001, the company 3M has donated a 1143mm x 2362mm pre printed mat to FIRST LEGO League.

The Roll out mat rolls out to form your official playing field surface in the FLL table.

A FLL team can choose between 2 table solutions depending on the specific needs. The solutions are:

- 1) Tabletop solution
- 2) Competition table used at tournaments.

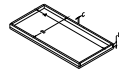
Both solutions are fine and it all depends on how much work you will put into making of the table and what your needs are.

If you are a tournament partner, you have to make the official competition table.

Note that FLL use the Metric system.

**On the next pages you can see how to build the competition table.
Choose the solution that fit your needs**

Tabletop solution



Use this solution if you want a stable training table with a solid base.
This solution is only for training and can not be used at Tournaments.

For this solution you need:

- 1 pcs. Table surface in plywood 20 x 1230 x 2450 mm
- 2 pcs. Large field border: 40 x 90 x 2450 mm
- 2 pcs. small field border: 40 x 90 x 1150 mm
- 1 pcs. Dummy border 40 x 90 x 300 mm.(look at step 5 for use)
- 1 FLL Roll out mat (from your Field Set up kit)
- 20 Large screws
- Screwdriver (power preferable)
- Clamps
- Black paint to the borders.

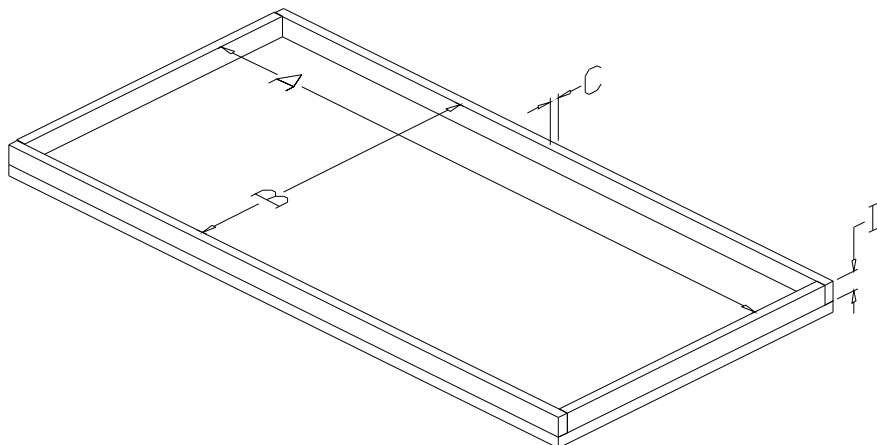
Instructions:

Step 1:

Paint the Field Borders + the dummy border black.

Step 2:

Lay down the Field borders and surface as shown on the picture



A = 2370mm, B= 1150mm, C= 40mm, D = 90mm,

Step 3:

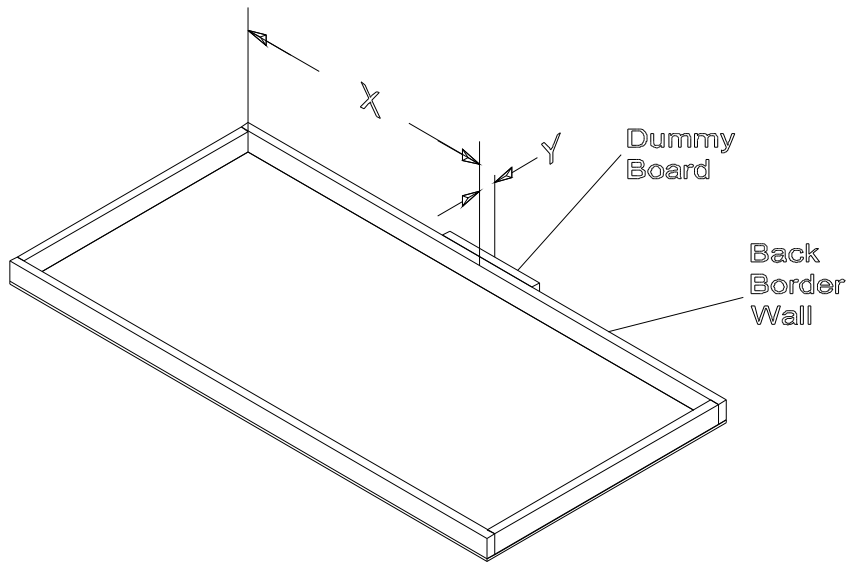
Double check that your roll out mat fit into the borders.

Step 4:

Fasten the Borders with Large screws.

Step 5:

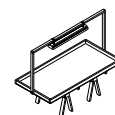
Fasten the dummy border. As shown on the picture below.



$X = 1225 \text{ mm}$. $Y = 80 \text{ mm}$.

You are now ready to go practice. Please note that light conditions in the area where your team practise may be different from a tournament area, therefore be prepared to adjust your light sensor at site.

Competition table used at tournaments.



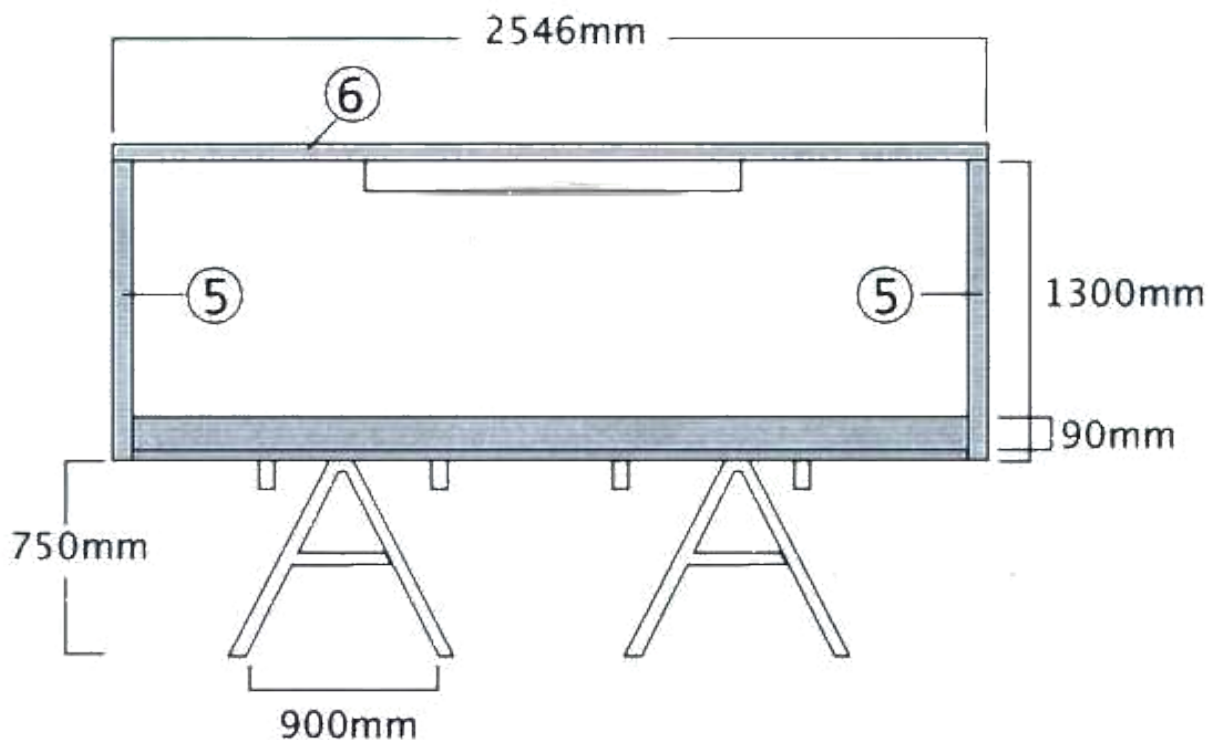
This table is for use at FLL Tournaments.

If you are a FLL Team and want to build this table for practice, you are welcome to do that, but it's not necessary. The tabletop solution is enough for training purpose.

For this solution you need:

- 1 pcs. Table surface in plywood 20 x 1230 x 2450 mm.
- 2 pcs. Large field border: 40 x 90 x 2450 mm.
- 2 pcs. Small field border: 40 x 90 x 1150 mm.
- 1 pcs. Dummy border 40 x 90 x 300 mm. (look at step 5 for use)
- 1 FLL Roll out mat (from your Field Set up kit).
- app.50 Large screws.
- Screwdriver (power preferable).
- Clamps.

- Black paint.
- 4 pcs. of stiffener 48 x 68 x 1200mm.
- 2 pcs. Upright 48 x 98 x 1300mm (No. "5" on drawing).
- Crossbeam 48 x 98 x 2546mm (No. "6" on drawing.)
- 1 Flourent shop light 40 watt tubes
- 2 Sawhorses high app. 750mm.



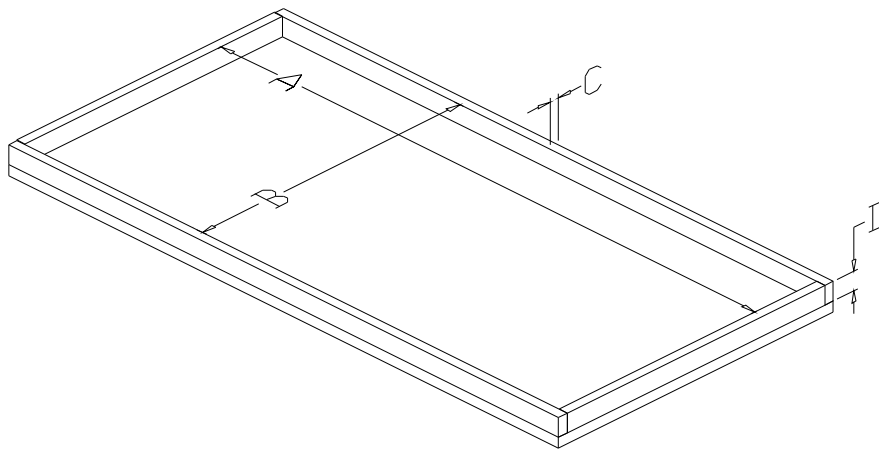
How to build the Competition table:

Step 1:

Paint the Field Borders, Upright and crossbeam black.

Step 2:

Lay down the Field borders and surface as shown on the picture



$A = 2370\text{mm}$, $B = 1150\text{mm}$, $C = 40\text{mm}$, $D = 90\text{mm}$,

Step 3:

Double check that your roll out mat fit into the borders.

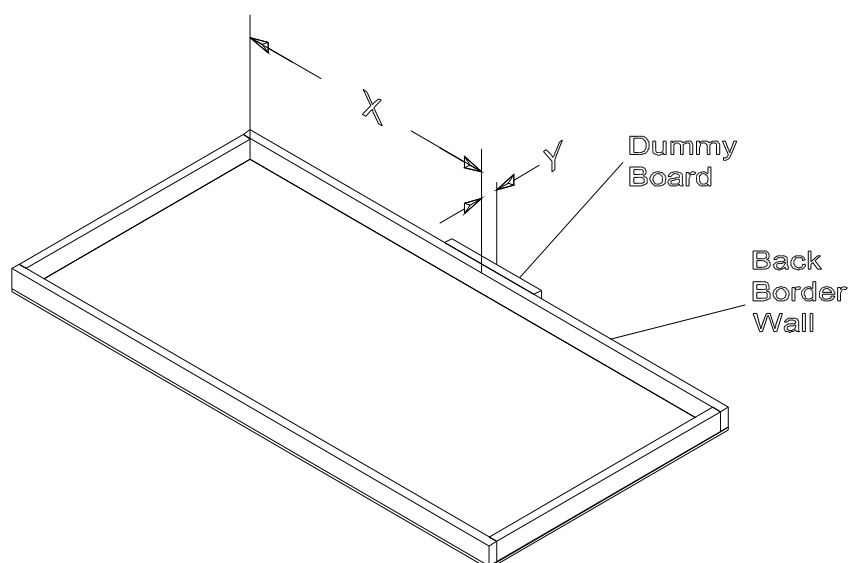
Step 4:

Fasten the Borders with Large screws.

Step 5:

USE THIS STEP ONLY IF YOUR TABLE IS A STAND ALONE TABLE. IF YOU HAVE TO TABLES AGAINST EACH OTHER IN A TOURNAMENT SITUATION, THIS STEP SHALL BE SKIPPED.

Fasten the dummy border. As shown on the picture below.



$X = 1225\text{ mm}$. $Y = 80\text{ mm}$.

Step 6

On the bottom face, locate, clamp, and screw on the Stiffeners as shown in Figure 1. Place the stiffeners so they make a solid base.

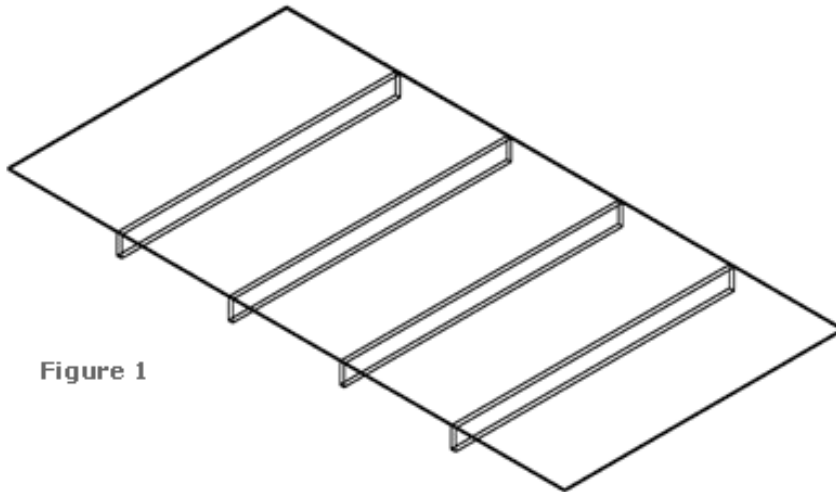


Figure 1

Step 7:

As shown below, center, clamp, level, and screw the uprights onto the outside face of the short Field Borders. With the help of another person, situate the Cross Beam on top of the two uprights and screw it down. Hang the shop light by its chains from the center of the Cross Beam. With the help of another person, place the whole assembly on short saw horses.

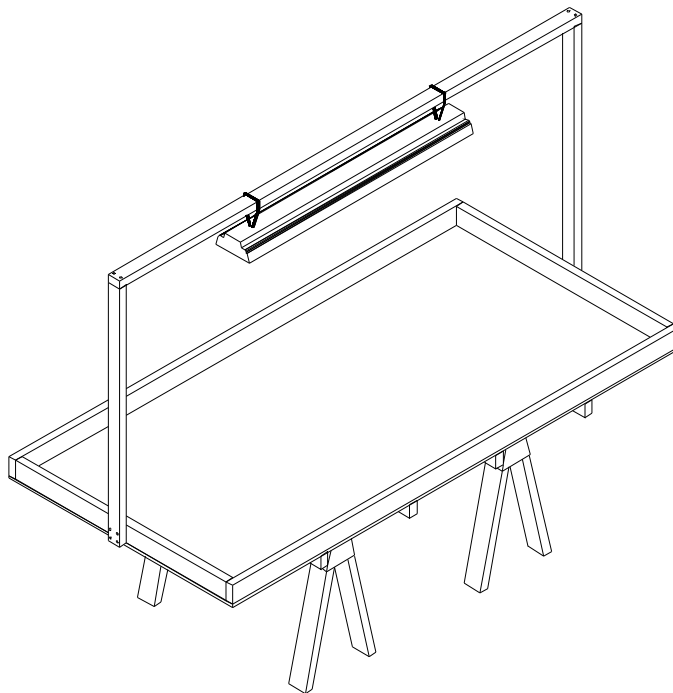


Table in a Tournament situation :

TOURNAMENT
FRAMEWORK

